

**DEVELOPMENT OF MASS-CUSTOMIZATION ENGINE FOR HOUSE
FINISHING**

By

NORKHAIRIAH BINTI ABU BAKAR

2002326483

**THESIS IS SUBMITTED IN FULFILMENT OF THE REQUIREMENT FOR THE
BACHELOR OF SCIENCE (HONOURS) INTELLIGENT SYSTEMS (CS 223)**

**FACULTY OF INFORMATION TECHNOLOGY & QUANTITATIVE SCIENCE
UNIVERSITI TEKNOLOGI MARA
SHAH ALAM**

OCTOBER 2004

DECLARATION

I hereby declare that the work in this project is my own except for quotations and summaries which have been duly acknowledged.

29th OCTOBER 2004

NORKHAIRIAH BINTI ABU BAKAR

2002326483

APPROVAL

**DEVELOPMENT OF MASS-CUSTOMIZATION ENGINE FOR HOUSE
FINISHING**

BY

NORKHAIRIAH ABU BAKAR

2002326483

This thesis was prepared under the direction of thesis advisor, Prof. Madya Dr. Norlaila binti Md Noor, Department of Intelligent System. It was submitted to the Faculty of Information Technology and Quantitative Sciences and was accepted in fulfillment of the requirements for the degree of Bachelor Science.

Approved by:

Prof. Madya Dr Norlaila binti Md Nor
Thesis Supervisor

Date: 29th OCTOBER 2004

ABSTRACT

Nowadays, people try to grip with new technology of computer especially in expert system revolution. The consistent knowledge as well as the effectiveness of giving solutions increases the demand of developing expert systems in many areas. For examples, the successful of construction term in the real life may lead to the involvement of expert system mechanism. The first purpose of developing the Mass-Customization Engine for House's Finishing is to satisfy user requirement especially in customizing the house's finishing. Secondly is to construct model of information flow in customizing house base on current model of information flow of mass customization. The knowledge in this system is represented using rules; while the forward inference technique and backtracking technique is used for the reasoning process which is the backtracking technique can customize user's option. The system also provides the explanation facilities that include explaining facility that give the explanation on certain term on the interfaces. Although the system is successfully implemented, there are still weaknesses and the future enhancing are support.

CONTENTS

	Page
DECLARATION	ii
APPROVAL	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	vi
CONTENTS	vii
LIST OF FIGURES	xiii
CHAPTER 1 INTRODUCTION	
1.1 INTRODUCTION	1
1.2 BACKGROUND OF THE PROBLEM	3
1.3 PROBLEM DESCRIPTION	4
1.3.1 Unsatisfied User Requirement	4
1.3.2 Costly in Getting Information Advisor	4
1.4 PROJECT OBJECTIVES	5
1.5 PROJECT SCOPE	5
1.6 PROJECT SIGNIFICANCE	6
1.7 PROJECT LIMITATIONS	6